

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

TENTATIVE RESOLUTION NO. 95-

RECOMMENDATION FOR WATER QUALITY CERTIFICATION
OF
WETLAND FILL

CARGILL SALT DIVISION
ALAMEDA, SANTA CLARA, SAN MATEO COUNTY, CALIFORNIA

WHEREAS, Cargill Salt Division, (hereinafter Cargill), has applied to the State for Water Quality Certification under Section 401 of the Clean Water Act for the filling of 17 acres of wetland over 10 years as part of maintenance of their salt evaporation pond systems in South San Francisco Bay; and

WHEREAS, the wetlands to be impacted are primarily adjacent to dredge locks used to access the solar salt evaporation ponds for levee maintenance in San Mateo, Santa Clara and Alameda County; and

WHEREAS, the Regional Board under Section 401 of the Clean Water Act reviews applications to determine if the proposed activity will meet State water quality objectives for Water Quality Certification for the proposed activity; and

WHEREAS, Water Quality Certification (WQC) is a certification for an activity that requires a federal license or permit that there is reasonable assurance that the activity which may result in discharge to waters of the United States will not violate water quality objectives (Title 23, California Code of Regulations, Section 3830 et. seq.); and

WHEREAS, Cargill submitted an application for water quality certification on February 12, 1995, and the Regional Board Executive Officer has found the application complete at this time; and

WHEREAS, the California Environmental Quality Act (CEQA) requires all projects approved by State agencies to be in full compliance with CEQA, and requires a lead agency to prepare an appropriate environmental document (EIR or Negative Declaration) for such projects; and

WHEREAS, Cargill has demonstrated full compliance with CEQA by submitting a copy of the Final Environmental Assessment for this project as approved by the Bay Conservation and Development Commission (BCDC), which is a certified agency under CEQA; and

WHEREAS, the 17 acres of wetlands proposed to be impacted contain areas composed of hydric soils that are periodically inundated with surface and groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, and is therefore defined as a wetland according to 40 CFR 122.2; and

WHEREAS, these areas covered by wetland and riparian vegetation, provide valuable habitat for resident and migratory birds of a wide variety of species as well as provide wildlife habitat; and

WHEREAS, the Regional Board, in Resolution No. 87-106, dated August 19, 1987, adopted, in accordance with Section 13244 et. seq. of the California Water Code, amendments to the Water Quality Control Plan, San Francisco Bay Basin (Basin Plan) that established a policy for regulating wetland fill; and

WHEREAS, the Basin Plan Wetland Fill Policy establishes that there be no net loss of wetland acreage and no net loss of wetland habitat value when the project and the proposed mitigation are evaluated together and that mitigation for wetland fill projects be located in the same area of the Region, wherever possible, as the project; and

WHEREAS, Section 13142.5 of the California Water Code requires that the "highest priority shall be given to improving or eliminating discharges that adversely affect ... Wetlands, estuaries, and other biologically sensitive areas"; and

WHEREAS, Senate Concurrent Resolution No. 28 states that, "It is the intent of the legislature to preserve, protect, restore, and enhance California's wetlands and the multiple resources which depend on them for the benefit of the people of the State."; and

WHEREAS, the discharge of fill material into the wetlands of the project site will cause a condition of pollution to exist in these waters of the State by altering the quality and quantity of water in the area, that is needed to support wetland beneficial uses, to a degree that will eliminate the beneficial uses of these waters of the State; and

WHEREAS, Cargill has, through the Environmental Assessment, satisfied the terms of Section 404(b)1 of the Clean Water Act in showing that the chosen project is the least environmentally damaging that fulfills the stated project purpose; and

WHEREAS, the planned mitigation described in the Conceptual Mitigation and Monitoring Plan of 49 acres and the accompanying

mitigation monitoring and contingency plan should produce compensatory habitat value for the planned wetland impacts; now

BE IT THEREFORE RESOLVED, that this Regional Board recommends that the Executive Director of the State Water Resources Control Board grant Water Quality Certification pursuant to Section 401 of the Clean Water Act and State regulations in Title 23 California Code of Regulations Section 3830 et. seq., for the Cargill Salt Division, 10 Year Salt Pond System Maintenance Project, pursuant to the following conditions:

1. A formal Mitigation and Monitoring Plan for 49 acres of tidal wetland construction shall be submitted for approval by the Executive Officer of the Regional Board by July 1, 1995.
2. The proposed Mercury Sediment Study shall be completed to the satisfaction of the Executive Officer of the Regional Board.

BE IT FURTHER RESOLVED, that this Regional Board directs the Executive Officer to transmit this resolution to the Executive Director of the State Water Resources Control Board.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 24, 1995.

Steven R. Ritchie
Executive Officer

REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
INTERNAL MEMO

TO: Steven R. Ritchie
Executive Officer

File No. 2198.11
FROM: Dale Bowyer

DATE: May 8, 1995

SUBJECT: Cargill Salt Division, Salt Pond Levee and Dredge Lock
10 Year Maintenance Project, Alameda, Santa Clara, and San Mateo
Counties

Summary

Cargill Salt Division, (Cargill), has applied for Water Quality Certification that their proposed project will not violate State water quality standards. Cargill's proposed project involves 17 acres of temporary wetland disturbance and fill and habitat disturbance which is the estimated impact of 10 years of projected maintenance operations for their South Bay solar salt pond systems. Salt pond levees are maintained by a floating dredge which enters and exits salt pond systems through dredge locks. Once within a pond system, the floating dredge repairs levees which are subsiding or eroding by placing sediment from the salt pond floor on top of the levee.

The major water quality impacts in this typical levee maintenance procedure occur when the floating dredge is moved through the earthen dredge lock. Typically, these locks are surrounded by mud flats and salt marsh which the dredge must traverse to reach the lock. Moving the dredge through the lock involves moving part of the earthen levee of the lock and temporarily storing it where it can be reached by the dredge to rebuild the levee once the dredge is inside the lock.

Cargill has worked with various State and Federal Clean Water Act (CWA) Section 404 and resource agencies to develop Best Management Practices to minimize the impact of movement of the dredge through a dredge lock. Impacts to wetlands are temporary in nature, in that CWA Section 404 or Section 10 jurisdictional waters are not proposed to be filled by this project. However, wetland habitat values will be lost by the dredging and filling until wetland vegetation can be re-established in the disturbed areas. Wetland vegetation re-establishment varies from approximately one to three years, with full re-establishment requiring up to five years in some instances.

The 17 acre estimate of wetland impact over ten years is based on 3 to 5 lock entries per year out of the total of 38 dredge locks in the pond system, and an estimated impact per dredge lock entry based on the study of several recent uses of dredge locks.

Based on Cargill's proposal and the interagency work, I have prepared a Tentative Resolution that recommends that the Executive Director of the State Water Resources Control Board grant Water Quality Certification for the proposed project, and that specifies the conditions associated with the project's certification.

Proposed Activities

The activities to be covered by Cargill's proposed 10 year project include: repairing, rehabilitating, and servicing existing structures and facilities; relocating existing and installing new structures and facilities; utilizing 38 dredge locks; dredging within sloughs and salt marsh habitat for lock access; dredging within lock basins and within salt ponds and placing the material on eroding levees and in salt ponds for fortification and for floating dredge navigation; and sidecasting and stockpiling dredged material on small areas of mud flats and salt marsh. Also included is constructing new dredge locks in less environmentally sensitive areas to allow abandonment of existing locks in areas of high resource value.

The proposed project involves work in waters of the United States and, as such, requires a CWA Section 404 permit from the Army Corps of Engineers (Corps). The Corp's proposed permit will have a 10 year life, but the specific activities conducted each year are to be agreed upon prior to that maintenance year after review by the involved agencies. The permit provides the operating parameters and restrictions for each year's work. The permit also specifies that Cargill must provide 49 acres of wetland mitigation as compensation for the estimated impacts of the 10 year permit.

A more detailed description of the proposed activities and a draft of the proposed permit are included as excerpts of the Corps' Public Notice in Attachment A.

The Cargill South Bay Solar Salt Pond System

Cargill maintains approximately 200 miles of levees which contain salt evaporation and crystallizer beds covering an equivalent land area of 26,000 acres around the southern San Francisco Bay, 12,000 of which are owned by the U.S. Fish and Wildlife Service's (USFWS) National Wildlife Refuge. Saltwater from the Bay enters the outermost salt ponds and is moved throughout the ponds as solar evaporation increases the salinity of the salt brine. A series of pumps, ditches and pipelines transfer the salt brine through evaporator ponds and then to crystallizer beds located closer to shore in Newark and Redwood City. Salt is

crystallized, the remaining liquid called "bittern" is drained, and the salt is mechanically picked up and transferred for further processing at the plant in Newark.

Interagency Process for Permit Development

Cargill's proposed project involves the jurisdictions of several State and Federal Agencies and critical endangered species habitat and wetland of high value, some of which is located on National Wildlife Refuge property. For these reasons, it was determined that the most efficient manner to proceed with the Corps' permit development for the project was to create an interagency task force. As such, the proposed permit was produced and agreed upon by staff of the Corps, the USFWS, the California Department of Fish and Game, the Bay Conservation and Development Commission (BCDC), and the Regional Board. This process allowed the agencies to integrate their regulatory concerns and gave Cargill one platform to address these issues.

Alternative Maintenance Approaches

The greatest wetland impact associated with this proposed project is that associated with the use of the dredge locks, so, pursuant to CWA Section 404(b)1, all practical alternatives to the use of the floating dredge in levee maintenance were examined. Land based levee maintenance is possible for only a small fraction of the total levee mileage, and is already employed to some extent, so it was discounted as a project alternative. The primary alternative considered was the "transportable" dredge. This would involve a floating dredge constructed in each pond system. This alternative, after careful consideration by the interagency task force, was rejected for reasons of high cost, impracticality, and potential for more significant adverse impacts than the dredge lock proposal. The requirements for construction of the dredge within the pond system are a large building pad capable of supporting heavy loading, which would have to be constructed, and many truck loads of pieces of the floating dredge, which require a good load bearing road.

One activity added to the proposed project which will reduce the project's impacts is the creation of new, relocated dredge locks in some of the pond systems which will allow the abandonment of existing locks in sensitive, high wildlife use areas.

Best Management Practices

In order to reduce the wetland and wildlife impacts of dredge lock use and levee maintenance to a minimum, as is required by the CWA Section 404(b)1 guidelines, Best Management Practices (BMPs) have been developed and tested in the use of one lock already. These BMPs are outlined in Attachment B and will be included in the Corps' proposed permit.

Endangered Species Mitigation

Much of the Cargill Salt Pond system is habitat for several different endangered species, primarily rare and endangered birds. The most critical of these species to this project is the California Clapper Rail, a flightless bird that inhabits the relatively isolated salt marsh adjacent to sloughs surrounding the salt ponds. Most of the concerns of the agencies charged with the protection of these endangered species have been met by including restrictions on Cargill's maintenance actions in the Corps' proposed permit. These restrictions include seasonal and distance restrictions primarily to ensure breeding success of the species in question. Since several species are involved, restrictions of this type overlapped to the extent that basic maintenance would not be possible. Therefore, mitigation in the form of tidal marsh habitat was proffered in addition to that which was necessary to compensate for the direct CWA Section 404 impacts. The mitigation measures listed in the table in Attachment C are most of the Reasonable and Prudent measures required as mitigation through the Endangered Species Act Section 7 Consultation. This consultation occurred during the permit development through the task force effort.

Mitigation and Monitoring Plan

Cargill Salt Division has offered to berm off 49 acres of a salt evaporation intake pond, adjacent to the Whale's Tale Marsh in the Hayward Baumburg Tract area, to provide high quality tidal salt marsh habitat. A formal Mitigation and Monitoring Plan has not been submitted as of this date, but the design and construction are relatively straight forward. A new levee will be constructed across one end of Pond 1 of the Bauberg Tract Area, isolating 49 acres of this pond, and a flow structure will be placed through the Bay side levee to allow tidal action into the isolated segment.

The proposed mitigation site, Baumberg Tract Pond 1 has a high potential for early success as a tidal marsh because it has not subsided and is an intake pond. As such, it does not hold concentrated brines and the sediments are free of insoluble salts. The Tentative Resolution contains a condition that a formal Mitigation and Monitoring Plan for 49 acres of tidal wetland construction must be presented for approval by the Executive Officer of the Regional Board by July 1, 1995.

Pollutant Issues

Water and sediment quality issues arise in two forms. First, the sediments in some of the major South Bay Sloughs contain elevated mercury levels. The source is not certain, but may be due to the major mercury mining in the South Bay hills which occurred for many decades around the turn of the century. There is concern that the use of dredge locks in these sediments, and movement of sediment to fortify levees adjacent to these sloughs may cause

elevation of organic mercury in the food items of the endangered clapper rail. Therefore, the proposed permit requires that the proposed Mercury Sediment Study referred to in Attachment C look at a lock entry and levees in a pond complex adjacent to a known elevated mercury area. If impact on clapper rail prey items is observed, further measure will be taken to eliminate this impact. The Tentative Resolution requires that this study must be conducted to the satisfaction of the Executive Officer.

Second, when dredging occurs, sediments are suspended, and dissolved oxygen levels temporarily drop in the local water column of the activity, as oxygen depleted material is mixed into the water. This is of concern primarily in ponds which are feeding areas for two species, least terns and Forster's terns. Observations indicate that this impact does not cause a serious condition since there is alternate habitat in the vicinity.

CEQA Status

It is Board staff's opinion that the proposed project is in full compliance with the California Environmental Quality Act (CEQA) because it is a maintenance activity in full regulatory compliance, and also because BCDC, which is certified under CEQA, produced a functionally equivalent Final Environmental Assessment for the project.

Attachment A - Excerpt of U.S. Army Corps of Engineers Public Notice 19009E98, including site map, draft permit, and Conceptual Mitigation Design

Attachment B - Best Management Practices

Attachment C - Excerpt of Mercury Sediment Study